Miscellaneous Features Solutions

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Boolean type

- Briefly describe the bool type
  - bool is an integer type with two values, true (stored as 1) and false (stored as 0)
  - Conditional expressions have type bool
- Write a program to demonstrate the use of the bool type

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Implicit conversion and constructors

- How does implicit conversion of a class object occur?
  - When a class has a constructor with a single argument, the compiler may replace a value of the argument type with an object of the class. For example, when resolving a function call
- Why can it be problematic?
  - If by mistake the value is passed instead of an object of the class, there will not be a compiler error
- Write a simple program which demonstrates implicit conversion of a class object

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Implicit conversion and constructors

- How can implicit conversion of a class object be prevented?
  - If the constructor is made "explicit", the compiler will not use it for implicit conversions. It will only be used when a call to that constructor is made
- Modify your program to prevent the implicit conversion

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Initializer in for statement

- Write a simple program to show how a variable can be declared in a for statement
- What is the scope of this variable?
  - The scope of this variable will be the loop body only

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Constructor arguments

- Write a simple program to show that constructor arguments may have the same name as the member they are initializing

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